

the pinnate insertion of septal pairs became more and more modified to a cyclical system of insertion. The author points out in favour of this view how the untoward circumstances for coral existence which prevailed in Europe during the Upper Carboniferous, Permian, Triassic, and Liassic ages may have given a widespread impulse towards the carrying out and confirmation of the main evolutionary change as above stated. The change, however, has been ever since in progress. The author traces its constant working within the family of *Astræidæ*, its influence on *Eupsammidæ* and *Oculinidæ*, and so on.

There is therefore, in the author's opinion, no greater fallacy than the idea that some universal change took place amongst *Madreporaria* at the end of Palæozoic time and before the mid-Triassic era. One and the same line of evolution may be detected making its way in the group of *Madreporaria*. Precocity in advance was shown by the Palæozoic *Cyathophyllids*; hence the high differentiation of *Astræids*, *Eupsammids*, and *Fungids* as early as Mesozoic ages. On the other hand, the Palæozoic *Zaphrentids* and their descendants in Mesozoic times were remarkably backward in advance, and it is among their recent representatives that primitive structures and forms are chiefly upheld. Naturally retrogression and atavism is shown in various degree in all families, in none more so than in the *Turbinolids*, the family most closely allied with the ancient *Zaphrentids*.

The author draws up a new classificatory system of *Madreporaria* into a number of independent families of equal rank. These are based on the study of skeletal structures, known facts of anatomy, and phylogenetic relationships. She arranges the families, according to the lines of descent demonstrated in the present paper, as follows:—

*Zaphrentoidean Families*: *Zaphrentidæ*, *Amphiastræidæ*, *Turbinolidæ*, *Stylinidæ*, *Oculinidæ*, *Pocilloporidæ*, *Madreporidæ*, *Poritidæ*.

*Cyathophylloidean Families*: *Cyathophyllidæ*, *Astræidæ*, *Fungidæ*, *Eupsammidæ*.

XXXI.—*Descriptions of Two new Species of Snakes from Sarawak.* By Dr. A. GÜNTHER.

IN a collection of Snakes which I received recently from Mr. C. Hose there were two species which appear to be undescribed.